



AMATEURADIO

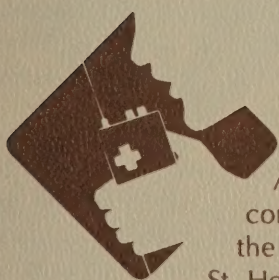
News of the Amateur Radio
and Amateur Satellite Services

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RADIO AMATEURS AS ACTIVE AS MOUNT ST. HELENS VOLCANO



Amateur Radio emergency communications were put to the test recently when Mount St. Helens violently awoke from

its 123-year sleep. Scientists first became aware of the Washington State mountain's activity when shallow earth tremors were reported in early March in the Mount St. Helens area. By late March the number and intensity of the quakes reached alarming levels, prompting state emergency preparedness officials to act.

Amateur Radio emergency communication networks were immediately activated. Amateurs, working through the Amateur Radio Emergency Service (ARES) and the Radio Amateur Civil Emergency Service (RACES), provided communication links through which information on the volcano's activity could be relayed to the Washington state Department of Emergency Services in Olympia.

On May 18, with the force of a 10-megaton atomic bomb, the entire northern side of Mount St. Helens exploded, sending hot ash and volcanic mud at tremendous speeds and destroying everything in its path.

Over 200 radio amateurs, some working with search and rescue teams and others positioned at key locations throughout Washington State, worked around the clock handling countless radio messages for the various local, state and federal emergency agencies. Amateur communication nets also relayed wind direction and fallout information to towns and cities in the volcanic cloud's path as it drifted east spreading ash amounting to several feet in some places.

(From a report by ARRL public relations assistant, John Brown, W7CKZ)

AMATEUR SATELLITE PROGRAM DOWN...

Amateur Radio suffered a temporary setback on May 23 when the launch vehicle carrying the latest amateur satellite, Phase IIIA, malfunctioned and crashed into the Atlantic Ocean, just minutes after lift-off.

Designed and built by the Radio Amateur Satellite Corporation (AMSAT), the Phase IIIA satellite was equipped with a kick motor to boost it into a higher orbit which, according to AMSAT officials, would have provided longer-range communications and allowed further computer experimentation.

AMSAT officials said their own computers, which were linked with Phase IIIA's computer onboard, showed the satellite to be functioning flawlessly until the premature splashdown.

Phase IIIA was the ninth in the Orbiting Satellite Carrying Amateur Radio (OSCAR) series. OSCAR 1, the nation's first non-governmental satellite, was built by a group of volunteer radio amateurs and launched in 1961.

...BUT NOT OUT

For radio amateurs, the Phase III satellite program means the beginning of a new era of more reliable, longer-range satellite communications. Phase IIIA, the first in the new satellite series, was a product of the determination the amateur community has to making that era dawn.

Five years of careful planning and designing, totaling more than 30 man-years of labor, went into the making of the Phase IIIA spacecraft. Untold amounts of personal resources, technical know-how and component parts were donated by amateurs around the world, making the space project truly an international effort. For these reasons, and more, the failure of Phase IIIA to reach an orbit was not a coup de grace, but a springboard for success in the future.

Functionally, the Phase III satellite design is sound. According to all reports, Phase IIIA successfully passed rigorous pre-launch testing and was functioning flawlessly when the European Space Agency rocket it was riding malfunctioned and crashed into the Atlantic Ocean.

Financially, because of the ill-fated launch, the developers of the satellite, the Radio Amateur Satellite Corporation (AMSAT), suffered a temporary setback; AMSAT is a non-profit research organization that relies heavily on memberships and donations to fund its space program. The latest reports from AMSAT, however, show life members "renewing" their memberships and contributions from various sources arriving at AMSAT daily.

The ARRL Foundation, as well as other organizations that have funded the space program in the past, have also pledged continued support.

Arranging another launch involves detailed negotiations that may take years, but AMSAT officials are confident the space program's proven track record will insure another launch at the earliest possible date. Since 1961 -- beginning with OSCAR 1, the nation's first non-governmental communications satellite -- amateurs have successfully built eight orbiting satellites, which rode "piggyback" into space aboard military or NASA space vehicles.

While construction of a replacement model, Phase IIIB, continues, two other amateur satellites will keep the space program off the ground. OSCAR 7, launched in 1974, continues to support communications when in sunlight, and OSCAR 8, now a little over 2 years old, is performing flawlessly and is expected to exceed its 3-year design life by several years.

What is important to the amateur satellite program now is not the hardware that was lost, but the knowledge that was gained. Knowledge in aerospace technology. Knowledge that amateurs can work as an effective team, despite national boundaries or cultural differences. Knowledge that, from within the ranks of Amateur Radio, there are enough resources to sustain a complex satellite communications program that rivals commercial endeavors.

VOLCANO CLAIMS TWO AMATEURS' LIVES

Among those killed during the recent Mount St. Helens eruption were two Amateur Radio operators, Gerald O. Martin, W6TQF and Reid Blackburn, KA7AMF.

Martin, a retired Navy officer from Concrete, Washington, was the first to report the eruption on the morning of May 18. He had been reporting the volcano's activity from his mobile home to the Washington State Department of Emergency Services, sometimes getting as close as 7 miles to Mount St. Helens. After the initial explosion on May 18, Martin remained on the air relaying a graphic description of the black, boiling cloud of steam and ash heading toward him. Moments later, the ridge where Martin had transmitted from was enveloped in thick, churning ash. Earlier this year Martin had helped Los Angeles hams with communications during the Southern California floods.

Blackburn, like Martin, also volunteered his help. A photographer with his hometown newspaper in Vancouver, Washington, Blackburn took a leave of absence to work on a U.S. Geological Survey project photographing the most recent eruptive activity at Mount St. Helens. When the volcano blew, Blackburn was at a USGS camp about 8 miles northwest of the mountain, operating a transmitter which controlled numerous cameras aimed at the volcano. Shortly after the eruption the observation site was covered with several feet of fiery ash, killing Blackburn. He is survived by his wife, Faye.

HEADS OF FCC, ARRL MEET



On June 19 Federal Communications Chairman Charles Ferris met with American Radio Relay League President Harry J. Dannels and Washington Area Coordinator Perry F. Williams. Accompanying Chairman Ferris were FCC Field Operations Bureau Chief James McKinney, Private Radio Bureau Chief Carlos Roberts, Chief Scientist Stephen Lukasik, and Greg Ballard, legal assistant to the Chairman.

The Amateur Radio Service is one of many services regulated by the Federal Communications Commission, but as an experimental and developmental service, it is unique. On the agenda of the June 19 meeting was the discussion of a closer alliance between the FCC and amateurs in exploring new technologies. The possibility of a digital license to encourage experimentation in techniques such as packet radio was also discussed.

Dannels and Williams expressed support of Senate Bill 2827 (see details on page 4), and cited the all-important

public service role which Amateur Radio plays day in and day out. This role was symbolized by the active participation of amateurs during the recent Mount St. Helens eruption which, unfortunately, resulted in the death of two amateurs while serving in the public interest.

The ARRL representatives also thanked the FCC for its support of the Amateur Radio Service at the 1979 World Administrative Radio Conference, and for its advocacy of an Amateur Radio Service in the People's Republic of China during a recent visit there.

The meeting laid the groundwork for a continuing dialogue between the FCC and one of its valuable resources - the Amateur Radio Service.

INTERNATIONAL DATELINES



LIBERIA... The Minister of Posts and Telecommunications recently announced Amateur Radio operating privileges were being restored in this African nation. In his May 19 announcement, Colonel Emmanuel T. Twegby cited Amateur Radio operators for their invaluable services to humanity, particularly during an epidemic in that country in 1972. Twegby also requested the aid of the amateur community in helping communications officials there curb unauthorized operations.

PERU... Member societies of the International Amateur Radio Union (IARU) from North and South America will meet in Lima on October 13-17 to discuss strategy in light of decisions made at the 1979 World Administrative Radio Conference. The fall conference will provide a forum for strengthening ties among the national amateur societies in this hemisphere, planning together to use frequencies cooperatively and more efficiently and reinforcing public and governmental awareness of the many benefits of the worldwide Amateur Radio Service. Both the American and Canadian Radio Relay Leagues will be sending delegates to Lima.

SOLOMON ISLANDS... The newly formed Solomon Islands Radio Society has been accepted into IARU membership. There are currently 30 licensed amateurs in this south-Pacific country, most of whom reside in Honiara, the capital. It is hoped this amateur population will increase in the coming years as the many people interested in Amateur Radio there are guided towards qualifying for a transmitting license. Accepted into the IARU along with the Solomon Islands were the Montserrat Amateur Radio Society and the Radio Society of The Gambia, boosting the number of member societies in the international Amateur Radio organization to 111.



Senate Bill 2827, presently before the Senate Subcommittee on Communications, proposes several amendments to the Communications Act of 1934, the law of the land which has governed tele-communications for 46 years. Three proposed amendments would have a beneficial effect on the Amateur Radio Service, and at the same time would serve to increase the effectiveness of the Federal Communications Commission, the agency which has its birthright in the original Act.

Perhaps the most urgent of the proposed changes would give the FCC "... authority to delegate to qualified persons, by contract or otherwise, the preparation and administration of examinations for Amateur Radio Operator licenses, and the issuance of temporary authorizations, but not licenses, to qualified applicants."

For almost thirty years examinations for the Novice Class of Amateur Radio license, the introductory license,

have been conducted by volunteer examiners. However, the FCC General Counsel has recently questioned the legality of the voluntary Novice examination program absent specific legislative authority. S. 2827 would provide that authority, and thus assure the future of the Novice examination program, a program which is endorsed by the FCC.

A second proposed amendment would provide for 10-year amateur licenses (currently amateur licenses are limited to five-year terms). The benefit of 10-year license terms is so simple as to be easily overlooked. There would be only half the usual number of license renewals, which would free up limited FCC resources for more pressing matters.

The third proposed change would give the FCC authority to establish minimum performance standards for TV receivers to reduce their susceptibility to interference. The FCC needs this authority because in the vast majority of interference cases, a contributing cause is found to be a lack of filtering or shielding in the receiving device. This amendment would clearly be in the public interest, as the FCC receives thousands of interference complaints yearly.

We urge your support of these provisions of S. 2827.



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